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ABSTRACT

A study was conducted to determine the need for new occupational programs in the area served by the Community College of Decatur and to assess the need for existing and proposed occupational programs. Over a 5-month period, questionnaires were mailed to selected representatives from businesses, industries, personal and public services, and health occupations; telephone interviews were conducted with certain representatives of the same types of employers; and the existing manpower, population, and economic data were reviewed. Out of 1,230 questionnaires, 625 (50.8 percent) were completed and returned, providing detailed data on 12 types of employment and training matters and 27 occupations. A copy of the questionnaire is appended. (KM)

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FINAL REPORT

"The Identification of Occupational Education Program Demand"

A Study Conducted by the
Office of Occupational Program Development
in Cooperation with the
Decatur Area Vocational Center
and Area Employers

JC 740 226

COMMUNITY COLLEGE OF DECATUR

100 N. WATER STREET

DECATUR, ILLINOIS 62523

June, 1974

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Introduction

The accuracy of any assessment and planning technique is limited by the quantity and quality of information available. Information availability is only one limitation with the time available for data gathering and analysis as another practical limitation. This final report is thereby an attempt to present data that is as detailed as possible with the least perishability of fact for the purpose of planning and developing occupational programs at the Community College of Decatur.

In pursuing this study there was considerable input and assistance provided by Mr. James Oettel, Director of Vocational Education, Decatur Public Schools; Mr. William Rosser, Director, Decatur Area Vocational Center; Mr. Edward Huite, Accounting and Data Processing Instructor, Decatur Area Vocational Center; and Mr. Ralph Peterson, Graphic Arts Instructor, Decatur Area Vocational Center. These individuals provided advice and services necessary for planning and implementation of the study.

Objectives of the Study

The study had as its main objectives the identification of need for development of new occupational programs, and also the assessment of need of existing and presently proposed occupational programs.

In order to meet the main objectives of the study, the project developer proposed the following enabling objectives. They were the assessment of:

1. Employment opportunities for potential students in specific occupations within the present Community College of Decatur District and surrounding area; and
2. Area employer requirements in terms of inservice and pre-employment manpower training needs.

Purpose of the Study

The primary purpose of the study was to enable the Community College of Decatur, through the cooperative participation of citizenry of the area, to make sound curricular and program management decisions. The direct participation

by the citizens provided possibilities for a fresh view and new insights, as well as more extensive community involvement in pointing direction for development and change in community college occupational education.

Specifically, the study was designed to collect, analyze, and describe data:

1. Relative to the population, geography, and socio-economic factors of the area which are of importance in understanding the occupational education needs of the urban and rural areas of the Community College of Decatur District and in making future occupational education curricular plans;

2. Obtained from selected persons in agriculture, business, industry, personal and public service, health occupations, and education concerning their employment needs and practices in selected occupations; and

3. Relative, not only to the labor market needs and trends, but also to new and evolving occupations which can be used in developing new occupational programs.

Questions

The objectives and purposes of the study lead to a number of questions concerning the manpower needs, job requirements, and educational needs of area employers.

The following questions deal with those needs. They are not listed in priority.

1. What are the current and projected entry level employment opportunities in this area?

2. What is the generally accepted level of performance and ability requirements for entry level jobs?

3. What are the wages, employment trends, and work force status by employer?

4. What are the employers' alternative sources of supply in an occupation for which occupational education is (is not) being provided?

5. What is the present current labor force supply estimate by employer for given occupations?

6. What are the supplemental data on educational programs offered by each employer?

7. How do employers adjust their production techniques, recruitment, and training methods in response to continued unfilled openings?

8. What job areas present the greatest problems in terms of obtaining qualified personnel?

9. What changes do various employers plan on in terms of production or business facility in the next five years (new specialized equipment, expansion, new product lines)?

10. What types of training would various employers like to see the Community College of Decatur engage in to aid in providing personnel (including inservice, as well as pre-employment)?

11. What is the present supply of qualified employees by position (surplus, adequate, scarce)?

Methodology and the Target Population

The techniques and instrumentation used during the study were designed so as to be replicable at different times for purpose of follow-up and adjustment. Obviously, all assumptions of the survey model and instrumentation should be reasonable, and should be explicitly and clearly stated. Basically, the study included the following activity components. These activities were initiated on November 21, 1973, and terminated on April 19, 1974.

1. Personal structured telephone interviews and orientations with selected representation from business, industry, personal and public service, and health occupations;

2. Mailed questionnaires to selected representatives from businesses, industries, personal and public service, and health occupations; and

3. Summarization of existing manpower, population and economic data.

Responses to the mailed questionnaires sent to selected representatives from businesses, industries, personal and public services, and health occupations were gathered by two different methods.

If an organization consisted of 100 or more employees, then a telephone interview and orientation was conducted with selected organizational representatives to be followed by a mailed questionnaire. When a response to the mailed questionnaire was not obtained from an organization, follow-up letters and a telephone call were used to assure adequate data collection.

For organizations with less than 100 employees, a questionnaire was sent without an orientation telephone call. Information required for interpretation and completion of the mailed questionnaire was included with the questionnaire. Follow-up letters were used when there was no response to the initial questionnaire.

Heavy weighting of larger organizations in terms of telephone interviews and orientations was justified on grounds that such units exhibit the broadest possible diversity of occupations, and as a result are more critical in terms of large manpower requirements. Nonresponding large organizations received three follow-up letters. Smaller organizational groups are important in the summation of total needs. The nonresponding smaller organizations received two follow-up letters.

The geographic area surveyed was determined largely along the boundary lines of the proposed College District to include the following school districts: Clinton, Lincoln, Beason, Illiopolis, Warrensburg-Latham, Niantic-Harristown, Maroa-Forsyth, Argenta-Oreana, Cerro Gordo, Decatur, Blue Mound-Boody, Stonington, Macon, Moweaqua, Assumption, and Mount Zion.

Within the surveyed geographic area the following types of employing organizations were contacted:

1. Architectural Firms
2. Engineering Firms
3. Decatur Automotive Trades Association Members
4. Fire and Burglary Alarm Service Shops
5. Antenna Service Shops
6. Appliance Service Shops
7. Electronic Equipment Shops
8. Radio Communication Equipment Shops
9. Radio and TV Equipment Service Shops
10. Radio and TV Broadcasting Companies
11. Cable Television Services
12. Data Processing Contract Services
13. Telephone Companies
14. Electric Motor Repair Shops
15. Home Builders Association Members
16. Lumber and Material Merchants
17. Sheriff Offices
18. Chiefs of Police
19. Chiefs of Fire Departments
20. Insurance Agencies
21. All Manufacturers
22. Commercial Artists' Studios
23. Ambulance Services
24. Florists and Landscapers
25. Veterinarians, Animal Hospitals, Kennels
26. Newspapers
27. Cabinet Shops

28. Chemical Manufacturers
29. Machine Shops
30. Tool and Die Shops
31. Seed Companies
32. Packing Companies
33. Food Processing
34. Concrete Product Manufacturers
35. Fertilizer Services
36. Heating and Air Conditioning Contractors (Sheet Metal)
37. Electrical Contractors
38. Plumbing Contractors
39. Concrete Contractors (Masonry and Stone)
40. Major Building Contractors
41. Independent Garage Owners
42. Grain Elevators
43. Restaurants
44. Hotels and Motels
45. Dentists
46. Physicians
47. Hospitals
48. Photographers
49. Banks and Credit Unions
50. Nursing Homes
51. Retail Stores (Downtown Decatur)
52. New Auto Sales and Service
53. Used Auto Sales and Service
54. Auto Body Shops
55. Printers and Lithographers
56. Detective Agencies
57. Psychologists
58. Real Estate Agencies (limited)

The following groups were <u>not</u> contacted, but may be as future need arises:

1. Child Care Centers and Nursery Schools
2. Real Estate (total)
3. Truckers
4. Attorneys
5. Bakeries
6. Schools
7. Retail Stores (outside of downtown Decatur)
8. Libraries
9. Barbers
10. Government Offices
11. Retail Food Stores
12. Excavating Contractors
13. Beauty Salons
14. Small Gas Engine Repair Shops
15. Chiropractors
16. Churches (child care activities only)
17. Cleaners and Dyers
18. Service Stations (auto)

Design of the survey instruments used was based upon examples from several recent surveys conducted in Illinois and other adjacent states modified by local requirements and the judgments of an informal jury of administrators at the College, the Decatur Area Vocational Center, and the Decatur Public Schools. The instruments were designed in such a way that the data collected could be coded by clerical personnel, keypunched, and processed by computer (Appendix A).

An effort was made to coordinate the initial survey mailing with publicity through radio and newspaper announcements.

Addressing, mailing, receiving, and coding were clerical processes carried out by a student assistant with supervision by professional and classified staff. Student keypunch operators from the Decatur Area Vocational Center

then processed the returned coded survey forms for subsequent analysis.

Another activity of the project was the analysis of existing data provided by local and State agencies.

Presentation of the Survey Data

This section of the report is intended to provide basic information dealing with the data gathered during the area survey. The data gathering was accomplished by mailing survey forms to 1,297 employing organizations. Of the total number of survey forms mailed, there were 67 (5.2%) returned for reasons given such as: (1) business no longer in operation; (2) bankruptcy; (3) deceased owner; (4) retirement, etc. Of the remaining surveys, 1,230, there were 625 (50.8%) surveys completed and returned by the employing organizations.

The total number of surveys returned indicated a total reported work force of 36,978 employees.[1] This number includes all employees in the organizations, and should not be confused with the summation of the total number of employees to be reported for specific job titles as requested on the survey form (List A of Appendix A). The reported work force total (36,978) included certain professional classifications that were not considered for this study (e.g., physicians, attorneys, etc.). This total represents approximately 62.4 percent of the Decatur SMSA work force.

Table 1 shows the distribution of responding employers for various organizational sizes. The majority of those organizations not responding to the item were judged as falling in the 0-9 and 10-19 employee size range.

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[1]The January, 1974 Decatur SMSA (consists of all of Macon County) civilian work force is estimated to be 59,275 employees. The total employed work force is estimated to be 56,700 employees. There are approximately 4,000 nonagricultural self-employed and unpaid and domestic workers in private households. Source: Area Manpower Review, Illinois State Employment Service, February, 1974.

TABLE 1

RESPONDING ORGANIZATIONS BY NUMBER OF EMPLOYEES

Range of Employee Numbers for the Organizations	Number of Organizations	Percent of Return
0-9	320	51.2
10-19	75	12.0
20-75	108	17.3
75-149	24	3.8
150-499	5	0.8
500-999	7	1.1
1000 or More	7	1.1
No Response	79	12.6

Table 2 indicates the totals of major union affiliations for the responding organizations. Many organizations indicated affiliation with more than one union. A majority of the "other" classification total number were professional or fraternal groups.

TABLE 2

UNION AFFILIATIONS OF EMPLOYING ORGANIZATIONS

Union	Number of Organizations	Union	Number of Organizations
IAW	12	URW (Retail)	0
UGCW	10	AFL	20
AFGM	64	CIO	14
P & S	50	EW	7
T & C	2	BM&TS	1
AIW	22	B&CL	1
UAW	4	RSE	0
URW (Rubber)	2	Carpenters	5
MPO	0	Painters	4
SMW	1	None	376
		Other	34

Table 3 presents the breakdown of responses indicating the activities of each organization. The numbers reported are the principal activities of the various organizations. Many organizations indicated a secondary activity (e.g., Insurance/Real Estate, Wholesaling/Retailing, Construction/Service and Repair, etc.). The secondary activity is <u>not</u> included in this breakdown.

TABLE 3

MAJOR ORGANIZATIONAL GROUPS BY CLASSIFICATION

Number of Organizations	Percent of Return	Major Groups
11	1.8	Agricultural Processing (Grain, Merchandising, Converting, etc.)
6	0.9	Agricultural Service (Farm Equip., Dealers, etc.)
13	2.1	Advertising (Radio, Newspaper, Display, TV, etc.)
31	4.9	Auto Service (Dealers, Parts, Service Stations, etc.)
15	2.4	Bank and Finance (Loan, Credit, etc.)
47	7.5	Construction (Commercial and Residential Builders, Electrical, Road Contractors, etc.)
2	0.3	Education (Public schools, Private schools, etc.)
1	0.2	Entertainment and Recreation (Orchestras, Parks, Theaters, etc.)
5	0.8	Food, Dairy, Drink, (Retail) (Supermarkets, Groceries, etc.)
47	7.5	Retail -- other than food, dairy and drink (Retail Merchants)
114	18.2	Health, Hospital, Medical, Dental (Physicians, etc.)
25	4.0	Professional -- other than Medical and Dental (Lawyers, Engineers, Architects, etc.)
31	4.9	Durable Manufacturing (Hard goods)
25	4.0	Non-Durable Manufacturing (Soft goods)
22	3.5	Government -- Federal, State, (County office, etc.)
9	1.4	Hotel and Motel (Inns)
34	5.4	Insurance (Mutuals, etc.)
4	0.6	Real Estate (Brokers)

TABLE 3 continued

MAJOR ORGANIZATIONAL GROUPS BY CLASSIFICATION

Number of Organizations	Percent of Return	Major Groups
8	1.3	Restaurant (Clubs, Motel, Cafe, etc.)
45	7.2	Service and Repair (other than auto) (Appliance Shops, Industrial, etc.)
2	0.3	Transportation (Travel Bureaus, Railroads, Trucking, etc.)
2	0.3	Utilities (Water, Lights, Gas, etc.)
5	0.8	Wholesaling (all products)
11	1.7	Others
110	17.7	Not Reported

The total number of male employees reported on was 13,125 (61.5%), and the total number of female employees was 8,209 (38.5%). The grand total of employees reported for all occupational titles was 21,334, or 57.6 percent of the total employees reported by all of the surveyed organizations. The grand total of employees reported (21,334) represents approximately 35.9 percent of the employed Decatur SMSA civilian work force.

When the employers were asked to what extent the existing occupational education facilities in the area met their training needs, 59 (9.4%) responded that they were very adequate, 213 (34.1%) indicated they were adequate, 187 (29.9%) indicated the occupational education facilities were not adequate, and 166 (26.6%) did not respond.

The responding organizations indicated whether there was an interest in providing a representative(s) to participate in discussions for the improvement of occupational education in the area. One hundred thirty-six (21.8) organizations indicated an interest in providing representatives, 210 (33.6%) were undecided, and 136 (21.8%) were not interested. One hundred forty-three

(22.9%) did not respond.

A number of formal training programs exist in the employing organizations. Of the total number responding there were 223 (35.7%) providing some type of training program. Table 4 presents the number of training program types offered by the employing organizations.

TABLE 4

EMPLOYERS' TRAINING PROGRAMS

Number of Organizations	Program Type	Number of Organizations	Program Type
73	Apprenticeship	17	Community college student on-the-job
81	Supervisory training		
57	Technician training	26	Cooperative training
29	Executive development	8	Plant management
72	High school student on-the-job	38	Job upgrading
		44	Other

A number of area organizations surveyed indicated that they provide reimbursement for college study for their employees. A total of 113 (18.1%) organizations returning survey forms have some type of reimbursement plan. Table 5 indicates the frequency of response by the employers to various reimbursement options.

TABLE 5

EMPLOYEE EDUCATIONAL REIMBURSEMENT OPTIONS

Number of Organizations	Reimbursement Options
	Salaried employees:
47	Full reimbursement
37	Partial reimbursement
	Hourly employees:
33	Full reimbursement
27	Partial reimbursement
	Reimbursement for:
78	Job related only
9	Any course selected by employee
8	Both of the above
12	Other

The employers indicated their general sources of trained new employee manpower for which occupational education is not presently being provided in the area. Some organizations indicated two or more of the sources listed. Table 6 presents the number of manpower sources by type.

TABLE 6

SOURCES OF TRAINED MANPOWER FOR EMPLOYING ORGANIZATIONS

Number of Organizations	Source
135	Private training schools
204	Public community colleges
126	Other industries
61	Special company training schools
44	Other

Table 7 shows the summation of numbers of organizations indicating which occupational titles present the greatest problems in terms of obtaining qualified personnel.

TABLE 7

SUMMARY OF OCCUPATIONAL TITLES FOR WHICH IT WAS JUDGED DIFFICULT TO FIND QUALIFIED PERSONNEL

Occupational Code/Title	Number of Organizations
015 Auto Body Repairman	7
016 Auto Mechanic	17
023 Bookkeeper	9
031 Carpenter	12
035 Chef, Cook	7
052 Dental Assistant	13
056 Draftsman	7
057 Driver, Truck and Bus	8
060 Electrical Engineering Technician	8
065 Electronics, Radio and TV	12
074 Foreman, Manufacturing	6
075 Foreman, Other	7
083 Heating and Air Conditioning	7
106 Machinist	12
107 Maintenance Worker, Electrical	7
108 Maintenance Worker, Mechanical	11
117 Medical Secretary	7

TABLE 7 continued

SUMMARY OF OCCUPATIONAL TITLES FOR WHICH IT WAS JUDGED DIFFICULT TO FIND QUALIFIED PERSONNEL

Occupational Code/Title	Number of Organizations
123 Nurse (LPN)	6
124 Nurse (RN)	11
125 Nursing Aide	6
130 Painter, Paper Hanger	5
141 Policeman, Detective	6
152 Retail Sales Clerk	9
154 Sales Representative	9
155 Salesman, Automotive	5
156 Salesman, Insurance	14
157 Salesman, Real Estate	5
160 Secretary	10
163 Sheet Metal Worker	6
170 Tailor	5
172 Toolmaker, Die Sinker	5
180 Welder, Flame Cutter	9

The employers indicated changes planned in terms of increased production, business facility, or operating characteristics. Table 8 presents a general summary of planned changes for the employers.

TABLE 8

PLANNED CHANGES BY EMPLOYERS

Number of Organizations	Change
112	New specialized equipment
129	Facility expansion
57	New product lines
64	New technologies
35	Other

Area employers indicated the types of occupational training, by occupational title, that they believed justified to be offered by the Community College of Decatur. Table 9 presents a summary for upgrading inservice training needs and Table 10 presents a summary for initial employment (pre-employment) training needs.

TABLE 9

EMPLOYER (INSERVICE) TRAINING NEEDS

Occupational Code/Title	Number of Organizations
011 Architectural Draftsman	5
016 Auto Mechanic or Repairman	7
023 Bookkeeper	6
052 Dental Assistant	5
060 Electrical Engineering Technician	5
065 Electronics Repair, Radio and TV	5
069 Fireman, Fire Department	5
106 Machinist	7
107 Maintenance Worker, Electrical	6
108 Maintenance Worker, Mechanical	7
115 Medical Assistant	5
152 Retail Sales Clerk	7
160 Secretary	8
180 Welder, Flame Cutter	5

TABLE 10

EMPLOYER (PREEMPLOYMENT) TRAINING NEEDS

Occupational Code/Title	Number of Organizations
052 Dental Assistant	8
053 Dental Hygienist	6
065 Electronics, Radio and TV	6
106 Machinist	5
107 Maintenance Worker, Electrical	5
108 Maintenance Worker, Mechanical	5
152 Retail Sales Clerk	5
156 Salesman, Insurance	8
160 Secretary	5
180 Welder, Flame Cutter	5

Various criteria were used in identifying a group of occupational titles which appear to be significant in terms of occupational program demand. The criteria are:

1. CRITERION A: This criterion required that there be at least 20 projected net new jobs available each year within the region (Macon, Moultrie, and Shelby Counties) for the next five years. Source: Forecasting Manpower Needs: A Manual for Local Vocational Planning, The Center for Business and Economic Research, Western Illinois University, 1973.

2. CRITERION B: This criterion required that at least five significantly sized employing organizations indicated a need for inservice training for the occupational title.

3. CRITERION C: This criterion required that at least five significantly sized employing organizations indicated a need for pre-employment training for the occupational title.

4. CRITERION D: This criterion required that at least five significantly sized employing organizations indicated that it is difficult to find qualified employees. Source: "The Identification of Occupational Education Program Demand, Interim Report," Community College of Decatur, April, 1974. (Note: The four following criteria are also based on this study).

5. CRITERION E: This criterion required that at least 25 percent of the responding organizations judged the local supply of qualified employees to be scarce or insufficient.

6. CRITERION F: This criterion required that at least 25 percent of the responding organizations judged their number of employees for a given occupational title to increase at least five percent over the next five years.

7. CRITERION G: This criterion required that there be at least 100 workers presently employed in the region (Macon, Moultrie, and Shelby Counties). Source: Occupational Manpower Projections, State of Illinois Office of Planning and Analysis, February, 1973.

Table 11 shows those occupational titles that appear to be significant and require additional detail study for possible program development. The following code should be used for interpretation of the table:

(+) meets the criterion;
(0) does not meet the criterion; and
(?) adequate data has not been developed.

TABLE 11

PRIORITY MATRIX OF OCCUPATIONAL TITLES

Occupational Code/Title	Criteria						
	A	B	C	D	E	F	G
180 Welder, Flame Cutter	+	+	+	+	+	+	+
069 Fireman, Fire Department	+	+	0	0	+	+	+
107 Maintenance Worker, Electrical	+	+	+	+	+	+	+
108 Maintenance Worker, Mechanical	+	+	+	+	+	+	+
106 Machinist	+	+	+	+	+	+	+
160 Secretary	+	+	+	+	0	+	+
152 Retail Sales Clerk	+	+	+	+	0	+	+
154 Sales Representative	+	0	0	+	+	+	+

TABLE 11 continued

PRIORITY MATRIX OF OCCUPATIONAL TITLES

Occupational Code/Title	Criteria A	B	C	D	E	F	G
141 Policeman, Detective	+	+	0	+	+	+	+
124 Nurse (RN)	+	0	0	+	+	+	+
057 Driver, Truck and Bus	+	0	0	+	0	+	+
035 Chef, Cook	+	0	0	+	+	0	+
031 Carpenter	+	0	0	+	+	+	+
023 Bookkeeper	+	+	0	+	0	+	+
056 Draftsman	+	0	0	+	+	+	+
123 Nurse (LPN)	+	0	0	+	0	0	+
125 Nursing Aide	+	0	0	+	+	+	+
052 Dental Assistant	?	+	+	+	+	+	+
016 Auto Mechanic or Repairman	0	+	0	+	+	+	+
172 Toolmaker, Die Sinker, Setter	0	0	0	+	+	+	+
015 Auto Body Repairman	0	0	0	+	+	+	+
055 Electronics, Radio and TV Repair	0	+	+	+	+	+	+
083 Heating and Air Conditioning Worker	?	0	0	+	+	+	?
156 Salesman, Insurance	?	0	+	+	+	+	+
163 Sheet Metal Worker	0	0	0	+	+	+	+
151 Retail Manager	?	0	0	+	+	+	+
060 Electrical/Electronics Engineering Technician	0	+	0	+	+	+	+
074 Foreman, Manufacturing	?	0	0	+	+	+	+
117 Medical Secretary	0	0	0	+	+	+	+
039 Civil Engineering Technician	0	0	0	0	+	+	0
043 Computer Programmer	0	0	0	0	+	+	0
073 Foreman, Construction	?	0	0	0	+	+	+
092 Industrial Engineering Technician	0	0	0	0	0	+	+
053 Dental Hygienist	0	0	+	0	+	0	+
170 Tailor	?	0	0	+	+	0	0

Summary and Findings

This report has been developed in an attempt to increase future-consciousness of occupational education in the College District. One measure of the effectiveness of the report will be the amount of effort the readers spend in thinking about, speculating, and anticipating the future needs for occupational education.

An effort to obtain accurate and up-to-date information dealing with the topic, hopefully, has decreased the perishability of fact. The data presented in the report can be considered accurately detailed with a minimum degree of

obsolescence. What is more important are the general themes brought forth by the presentation of the data.

The project developer contends that specific predictions are not to be made without reservations. Every statement about future needs for occupational education must be accompanied with economic and philosophical qualifiers of which this project developer is only partially aware.

The project developer intends to reflect upon the data presented in the report and to summarize the findings. "To prophesy is extremely difficult especially with respect to the future."

During the study there were 625 employing organizations responding with detailed information dealing with 21,334 employees. The following kinds of detailed data were gathered from the responding organizations. Certain information which the employing organizations considered confidential will not be divulged.

1. Union Affiliations of Employing Organizations
2. Major Firms by Classification
3. Totals of Employees by Occupational Title
4. Minimum Ages, Desired Competency Levels, and Salary Ranges for Occupational Titles
5. Employment Needs, Termination Rates, and Local Supply of Qualified Employees for the Occupational Titles
6. Employers' Training Programs
7. Employee Educational Reimbursement Options
8. Sources of Trained Manpower for Employing Organizations
9. Summary of Occupational Titles for which it is Difficult to Find Qualified Personnel
10. Planned Business and Industrial Changes by Employers
11. Employer Pre-employment Training Needs
12. Employer Inservice Training Needs

A relatively large number of employers indicated the following job titles to be difficult in obtaining <u>qualified</u> personnel: auto body repairman, auto mechanic, bookkeeper, carpenter, chef (cook), dental assistant, draftsman, driver (truck and bus), electrical engineering technician, radio and TV repairman, foreman (manufacturing), foreman (other), heating and air conditioning workers, machinists, maintenance workers (electrical and mechanical), medical

secretary, nurse (LPN), nurse (RN), nursing aid, painter and paper hanger, policeman, retail sales clerk, sales representative, salesman (auto, insurance, and real estate), secretary, sheet metal worker, tailor, toolmaker, and welder.

A relatively large number of employers indicated the following job titles required inservice training needs: architectural draftsman, auto mechanic, bookkeeper, dental assistant, electrical engineering technician, electronics repair (radio and TV), firemen, machinist, maintenance worker (electrical and mechanical), medical assistant, retail sales clerk, secretary, and welder.

A relatively large number of employers indicated the following job titles required attention in terms of preemployment training: dental assistant, dental hygienist, radio and TV repairman, machinist, maintenance worker (electrical and mechanical), retail sales clerk, salesman (insurance), secretary, and welder/flame cutter.

A number of documents and reports provided by various local and State agencies were reviewed. The remaining paragraphs of this summary present the main points from various reports.

The net new jobs projected for the three-county analytic region over the next five years are considered large in the following occupations: cooks, food service workers, waiters and waitresses, firemen, guards/watchmen, police, accounting clerks, bookkeepers, clerical and kindred, sales workers, secretaries, stenographers, draftsmen, carpenters, construction workers, truck drivers, health aids/orderlies, registered nurses, practical nurses, machinists, tool/die and mold makers, welders, cashiers, bank tellers, typists, plumbers, metal working operatives, and electricians.

Agriculture, forestry, fisheries, apparel, and railroad industries are projected to have negative percentage employment growth for the next 10 years in the Decatur SMSA. Private household workers are also decreasing in the Decatur SMSA.

Mining, petroleum, and coal product industries are projected to have no percentage employment change for the next 10 years in the Decatur SMSA.

Service organizations will grow at the greatest percentage rate in the Decatur SMSA. Following in order of growth will be the finance/insurance/real estate group. Third in projected percentage growth will be government employment followed in order by retail trade, durable goods manufacture, nondurable goods manufacture, and contract construction. Low percentage growth is projected for wholesale trade. The agriculture/forestry/fisheries group will actually decline in percentage growth. The reader should keep in mind that large percentage growth does not necessarily mean large absolute growth. When the above classifications are ranked by absolute growth the following order is found. Durable goods manufacture is greatest followed in order by services, retail trade, nondurable goods manufacture, government, contract construction, finance/insurance/real estate, wholesale trade, and agriculture/forestry/fisheries group.

High school students from the immediate Decatur area have expressed considerable interest in the career areas of: auto mechanics/service, forestry, baking, welding, farming/agriculture, machinist/tool and die maker, architecture, heavy construction, interior decorating, carpentry, cabinet making/woodwork, therapist, medical technician/x-ray, nursing, veterinary medicine, photography, biology/biochemistry, chemistry, mechanical engineering, math, zoology, electronics, electrical engineering, accounting, bookkeeping, banking, computer programming, management, secretarial, religion, law, law enforcement, military, psychology, youth leadership, and social work.

There is considerable student interest in a number of areas for which employment needs are not great. This fact could point out the need for increased career education/information experiences in the elementary and secondary schools.

Selected References

Information used in developing the study methodology and for manpower data analysis was gathered from a number of relevant sources. Of special interest were data collected from National, State, Analytic Planning Region Eight, and various county and city reports. The following documents are available from the Office of Occupational Program Development, Community College of Decatur.

1. "Annual Manpower Planning Report for the Decatur, Illinois Area Consisting of the Decatur Metropolitan Statistical Area for Fiscal Year 1974," Illinois State Employment Service, January, 1973.

2. Chicago, Cook County and Illinois Industrial Directory of Manufacturing and Industry, National Publishing Corporation, 1972.

3. County Business Patterns, 1971, United States Department of Commerce, Bureau of the Census, 1971.

4. "Decatur Area High Schools Career Interest Surveys," Lincoln Trails Council, BSA, June, 1974.

5. "Decatur, Illinois SMSA Area Manpower Review," Illinois State Employment Service, February, 1974.

6. Dictionary of Occupational Titles, United States Department of Labor, 1973.

7. Forecasting Manpower Needs: A Manual for Local Vocational Planning, The Center for Business and Economic Research, Western Illinois University, 1973.

8. General Social and Economic Characteristics for Illinois, United States Department of Commerce, Bureau of the Census, 1970.

9. Hospitals, American Hospital Association, 1969.

10. Illinois Manufacturers Directory, Manufacturers' News, Inc., 1973.

11. "Industrial Directory," Decatur Chamber of Commerce, 1973.

12. Manpower Forecasting for Vocational-Technical Education, ERIC Clearinghouse, The Ohio State University, February, 1972.

13. Occupational Manpower Projections, State of Illinois Office of Planning and Analysis, February, 1973.

14. Summary Uniform Demographic and Economic Data, 1970-2000, State of Illinois Bureau of the Budget, August, 1973.

15. "The Identification of Occupational Education Program Demand, Interim Report," Community College of Decatur, April, 1974.

16. The 1970 Census Profile, Decatur and Macon County, Illinois, Millikin University, 1972.

17. Tomorrow's Manpower Needs, U. S. Department of Labor, Revised 1971.

18. Urbanized Decatur Area General Plan, Economic Analysis and Forecast, Department of Community Development, October, 1973.

19. Urbanized Decatur Area General Plan, Population Inventory and Forecast, Department of Community Development, Revised January, 1973.

20. U. S. Manpower in the 1970's, United States Department of Labor, 1970.

From the forementioned documents the following data has been collected. These materials are available from the Office of Occupational Program Development

1. Major Industry Groups as Percentages of Total Employment Statewide, 1970-75-80.

2. Percentage Change of Major Industry Groups Statewide, 1970-1980.

3. Absolute Change of Employment in Major Industry Groups Statewide, 1970-1980.

4. Major Occupational Groups as Percentages of Total Employment Statewide, 1970-75-80.

5. Percentage Change of Major Occupational Groups Statewide, 1970-1980.

6. Absolute Employment Changes of Major Occupational Groups Statewide, 1970-1980.

7. State Total Projected Population, 1970-75-80-85.

8. Summary of State Totals by Occupational Structure, 1970-75-80 (235 Occupations).

9. Region Eight Projected Population, 1970-75-80-85 (Macon, Moultrie, and Shelby Counties).

10. Summary of Region Eight Totals by Occupational Structure, 1970-75-80 (235 Occupations).

11. Resident Population by County for Region Eight, 1970-2020.

12. Percentage Population Change by County for Region Eight.

13. Net New Jobs for Region Eight, 1974-1979.

14. Employment, Labor Force and Population Forecasts for Decatur SMSA, 1960-1995.

15. Historical Employment Trends for Decatur SMSA, 1950-1970.

16. Components of Employment Change for Decatur SMSA, 1950-1970.

17. "Basic/Nonbasic" Employment Analysis for Decatur SMSA.

18. Labor Force Trends and Comparisons.

19. 1970 Age Comparison, Population, Labor Force and Employment for Decatur SMSA.

20. Year of School Completed by Effective Labor Force in Selected Areas, 1970.

21. Occupational Group of Employed/Unemployed Persons for Decatur SMSA, 1970.

22. Occupational Groups and Growth Rates for Decatur SMSA, 1960-1970.

23. Employment Forecasts for Decatur SMSA, 1970-1995.

24. Selected Population Characteristics for Macon County and Decatur, 1975-1995.

25. Decatur Area High School Students' Career Interests, 1974.

APPENDIX A

OCCUPATIONAL EDUCATION DEMAND SURVEY FORM

(Note: Copies of the letters of transmittal for the initial survey and follow-up can be obtained by contacting the Office of Occupational Program Development).

CONFIDENTIAL: The information reported in this survey will be used only for occupational education planning purposes by the Community College of Decatur and area high schools, and will not be divulged to any other agency or party.

OCCUPATIONAL EDUCATION DEMAND SURVEY

INTRODUCTION: The purpose of this questionnaire is to gather information and opinions from business, industrial, governmental, professional, and personal services employers for use in establishing new occupational programs or for improving existing occupational educational programs for youth and adults in the area. Please fill in the survey form as completely and accurately as possible. The results will be used for occupational education planning purposes only and your organization will not be identified in any of the published reports.

SPECIAL NOTE: Please study the heading of each part of the survey form. If it is applicable to your organization, please complete that part; if not, proceed to the next part. When supplying employment data, please use only full-time employment figures.

PART I - GENERAL INFORMATION

1. Name of the organization _____
   (If a division of an organization, specify division and report only for the division.)

2. Mailing address _____
   (Number) (Street) (Town) (Zip Code)

3. Name of person(s) completing this form _____

4. Position or title of respondent(s) _____

5. Telephone number _____
   (Number) (Extension)

6. Total number of employees in your organization or division _____

7. Please check the major union affiliations for your organization.

___IAW	___UAW	___CIO	___None
___UGCW	___URW (Rubber)	___EW	___Other (identify below)
___AFGM	___MPO	___IM&TS	_____
___P & S	___SMW	___B&CL	_____
___T & C	___URW (Retail)	___RSE	_____
___AIW	___AFL	___Carpenters	_____
		___Painters	_____

8. Please check the space(s) opposite the description(s) which best identifies the activities of your organization.

___Agricultural Processing (Grain, Merchandising, Converting, etc.)

___Agricultural Service (Farm Equip. Dealers, etc.)

___Advertising (Radio, Newspaper, Display, TV, etc.)

___Auto Service (Dealers, Parts, Service Stations, etc.)

___Bank and Finance (Loan, Credit, etc.)

___Construction (Commercial and Residential Builders, Electrical, Road Contractors, etc.)

___Education (Public schools, Private schools, etc.)

___Entertainment and Recreation (Orchestras, Parks, Theaters, etc.)

___Food, Dairy, Drink, (Retail) (Supermarkets, Groceries, etc.)

___Retail -- other than food, dairy and drink (Retail Merchants)

___Health, Hospital, Medical, Dental (Physicians, etc.)

___Professional -- other than Medical and Dental (Lawyers, Engineers, Architects, etc.)

___Durable Manufacturing (Hard goods)

___Non-Durable Manufacturing (Soft goods)

___Government - Federal, State, County, and Local (County office, etc.)

___Hotel and Motel (Inns)

___Insurance (Mutuals, etc.)

___Real Estate (Brokers)

___Restaurant (Clubs, Motel, Cafe, etc.)

___Service and Repair (other than auto) (Appliance Shops, Industrial, etc.)

___Transportation (Travel Bureaus, Railroads, Trucking, etc.)

___Utilities (Water, Lights, Gas, etc.)

___Wholesaling (all products)

___Others (describe below)

_____

_____

_____

PART II - MANPOWER NEEDS

9. Please review completely the following LIST A of major occupational titles and code numbers, and identify those titles and codes which are relevant to your organization's operation. Mark on LIST A, in the spaces provided, the number of employees in each occupation, by sex, for your organization.

After marking your responses on LIST A, please supply information as requested on FORM B for only those occupational code numbers for which you have indicated employment figures on LIST A. PLEASE BE SURE TO INDICATE THE APPROPRIATE CODE NUMBER WHEN COMPLETING FORM B. THE CODE NUMBERS YOU INDICATE SHOULD BE THE RESULT OF YOUR MARKING ON LIST A. The first row on FORM B is given simply as an example.

Emphasis is to be placed on those occupational titles requiring less than a four-year college degree.

If you need more copies of FORM B, please feel free to photocopy the form or call 1-422-8387, Extension 37, and request additional copies.

LIST A

MAJOR OCCUPATIONAL TITLES AND CODE NUMBERS

The following occupational titles are taken from the Dictionary of Occupational Classifications published by the United States Department of Labor. A number of selected local occupational classifications have been added for this survey. PLEASE REVIEW THIS LIST AND INDICATE THE NUMBER OF MALE AND FEMALE EMPLOYEES YOU PRESENTLY HAVE IN YOUR ORGANIZATION FOR THE APPROPRIATE OCCUPATIONAL TITLE. AFTER YOU HAVE PROVIDED THE PRESENT EMPLOYMENT FIGURES ON THIS LIST, PLEASE COMPLETE THE FOLLOWING FORM B FOR THOSE OCCUPATIONAL CODE NUMBERS FOR WHICH YOU HAVE INDICATED PRESENT EMPLOYMENT FIGURES ON THIS LIST.

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		001	Accountant or Auditor
		002	Accounting Clerk
		003	Advertising Agent
		004	Agricultural Salesman
		005	Agricultural Technician
		006	Aircraft Mechanic or Repairman
		007	Ambulance Driver
		008	Animal Hospital Attendant
		009	Animal Technician
		010	Appliance Repairman
		011	Architectural Draftsman
		012	Attendant, Hospital and Health
		013	Attendant, Personal
		014	Attendant, Service Stations, Auto
		015	Auto Body Repairman
		016	Auto Mechanic or Repairman
		017	Aviation Electronics Technician
		018	Aviation Maintenance Technician
		019	Baker
		020	Barber
		021	Beautician
		022	Biological Technician
		023	Bookkeeper
		024	Brick and Stone Mason
		025	Building Contractor
		026	Building Service Worker, Janitor
		027	Buyer, Retail
		028	Buyer, Wholesale
		029	Cabinet Maker
		030	Cashier
		031	Carpenter
		032	Carpenter's Apprentice

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		033	Cement and Concrete Finisher
		034	Checker, Sales
		035	Chef, Cook
		036	Chemical Technician
		037	Chemical Worker
		038	Child Care and Guidance Worker
		039	Civil Engineering Technician
		040	Commercial Artist
		041	Compositor and Typesetter
		042	Computer Operations Manager
		043	Computer Programmer
		044	Computer Equipment Operator
		045	Computer Systems Analyst
		046	Construction Apprentice
		047	Construction Machinery Operator
		048	Construction Technician
		049	Dairy Worker
		050	Data-Processing Repairman
		051	Decorator and Window Dresser
		052	Dental Assistant
		053	Dental Hygienist
		054	Dental Lab Assistant
		055	Designer
		056	Draftsman
		057	Driver, Truck and Bus
		058	Dry Cleaner
		059	Educational Assistant
		060	Electrical/Electronics Engineering Technician
		061	Electrical Power Engineering Technician
		062	Electrical Power Station Worker
		063	Electrician

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		064	Electrician's Apprentice
		065	Electronics, Radio and TV Repairman
		066	Electrotyper and Stereotyper
		067	Engraver
		068	Environmental Control Technician
		069	Fireman, Fire Department
		070	Fireman, Industrial
		071	Food Service Apprentice
		072	Food Worker, Institutional
		073	Foreman, Construction
		074	Foreman, Manufacturing
		075	Foreman, Other
		076	Foundry Technician
		077	Foundry Worker
		078	Gardener and Grounds Keeper
		079	Geo-Sciences Technician
		080	Glass Worker
		081	Greenhouse Worker
		082	Guard or Watchman
		083	Heating and Air Conditioning Worker
		084	Health Records Technician
		085	Highway Patrolman
		086	Histologist
		087	Hospital Ward Clerk
		088	Hostess
		089	Hotel, Motel Manager
		090	Hotel, Motel Worker
		091	Illustrator, Industrial
		092	Industrial Engineering Technician
		093	Industrial Manager, Supervisor
		094	Inhalation Therapist
		095	Interior Decorator
		096	Key Punch Operator or Verifier
		097	Kitchen Worker, Hotel, Restaurants
		098	Laboratory Assistant, Industrial
		099	Land Surveyor
		100	Landscaper

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		101	Laundry Worker
		102	Library Assistant, Attendant
		103	Lineman and Serviceman, Telegraph, Telephone, Power
		104	Lithographer
		105	Machine Shop Worker
		106	Machinist
		107	Maintenance Worker, Electrical
		108	Maintenance Worker, Mechanical
		109	Manager of Buildings and Grounds
		110	Manufacturing Assembler, Heavy Equipment
		111	Manufacturing Assembler, Tire
		112	Manufacturing Assembler, TV, Phonograph, Radio
		113	Manufacturing Assembler, Wood
		114	Mechanical Engineering Technician
		115	Medical Assistant
		116	Medical Lab Assistant
		117	Medical Secretary
		118	Mental Health Worker
		119	Metal Working Apprentice
		120	Metallurgical Technician
		121	Millwright
		122	Mortician, Assistants
		123	Nurse (LPN)
		124	Nurse (RN)
		125	Nursing Aide
		126	Occupational Therapy Assistant
		127	Office Clerk
		128	Office Machine Operator
		129	Optometrist's Assistant
		130	Painter, Paper Hanger
		131	Pattern, Model Maker
		132	Petroleum Worker
		133	Photoengraver
		134	Photographer
		135	Photographic Processor
		136	Physical Therapy Assistant
		137	Pilot, Commercial

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		138	Plater
		139	Plumber, Pipe Fitter, Steam Fitter
		140	Plumber's Apprentice
		141	Policeman, Detective
		142	Printer, Pressman
		143	Printing Apprentice
		144	Production Controller
		145	Psychiatric Aide
		146	Radio Operator
		147	Receptionists
		148	Recreation Therapist
		149	Rehabilitation Assistant
		150	Restaurant Manager
		151	Retail Manager
		152	Retail Sales Clerk
		153	Roofer
		154	Sales Representative
		155	Salesman, Automotive
		156	Salesman, Insurance
		157	Salesman, Real Estate
		158	Salesman, Seed, Related
		159	Sanitary Works Operator
		160	Secretary
		161	Sewers and Stitchers
		162	Sheet Metal Apprentice
		163	Sheet Metal Worker
		164	Sheriff's Deputy
		165	Shipping Clerk, Stock, Receiving
		166	Stenographer
		167	Steward
		168	Structural Metal Worker
		169	Surgical Technician
		170	Tailor
		171	Telephone Operator
		172	Toolmaker, Die Sinker, Setter
		173	Transportation Agent
		174	Typist, Clerical
		175	Upholsterer
		176	Waiter

Indicate Number Presently Employed by Sex		Code Number	Occupational Titles
M	F		
		177	Waitress
		178	Water and Sewage Technician
		179	Water Works Operator
		180	Welder, Flame Cutter
		181	Wholesale Manager
		182	Other (describe below)

_____

_____

_____

_____

FORM B

MANPOWER INFORMATION

On this form, please list the occupational code numbers for which you have shown present employment figures on LIST A and then provide the requested information for those occupations represented by the code numbers. The first row is given simply as an example.

Occupational Code Number Taken from LIST A	Minimum Age Required for Job Entry	Desired Competency Level Required for Job Entry (check)				Estimated Employment Needs for the Next Five Years (check appropriate column)							Indicate Present Salary Range	Termination Rate (check)			Local Supply of Qualified Employees (check)		
		Unskilled	Semi-Skilled	Skilled	Supervisory	Increases		Same	Decreases					High 10% or More	Med. 9% to 3%	Low 0 to 2%	Scarce - Insufficient	Adequate - Sufficient	Surplus - Too Many
						Great	Small		Small	Great									
						More Than 20%	5-20%	+ - 4%	5-20%	More Than 20%									
011	18			✓			✓						2.00 - 6.50 /HR.			✓		✓	

PART III - TRAINING INFORMATION

10. To what extent do existing occupational education facilities in the area meet the occupational and training needs of your organization or establishment?

___Very Well ___Adequate ___Not Adequate

11. Would your organization be interested in providing a representative(s) to participate in discussions for further study of plans for improving occupational education and training in the area?

___Yes ___No ___Undecided

12. Are there formal training programs in your organization?

___Yes ___No

If yes, please check the types of training programs you now operate:

___Apprenticeship
___Supervisory training
___Technician training
___Executive development
___High school student on-the-job
___Community college student on-the-job
___Cooperative training
___Plant management
___Job upgrading
___Other (describe below)

_____

_____

13. Does your organization provide reimbursement for college study to your employees?

___Yes ___No

If yes, please check the appropriate conditions below:

Salaried employees:
___Full reimbursement
___Partial reimbursement

Hourly employees:
___Full reimbursement
___Partial reimbursement

Reimbursement for:
___Job related only
___Any course selected by employee
___Both of the above
___Other (describe below)

_____

_____

_____

14. What are your sources of trained <u>new</u> employee manpower for which occupational education is not presently being provided in this area?

___Private training schools
___Public community colleges
___Other industries
___Special company training schools
___Other (describe below)

_____

_____

15. What job areas, of those for which you indicated present employment on LIST A, present the greatest problems in terms of obtaining qualified personnel?

Code Number	Code Number	Code Number	Code Number
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ERSITY OF CALIF.
LOS ANGELES
AUG 9 197
ARINGHOUSE FOR

16. What changes do you plan on in terms of your production, business facility, or operating characteristics in the next five years?

___New specialized equipment
___Facility expansion
___New product lines
___New technologies
___Other (describe below)

_____
_____

17. What other types of training would you like to see the Community College of Decatur engage in to aid in providing trained personnel for your organization? (Include in-service, as well as pre-employment).

To Up-Grade Present and Future Employees (In-Service)		To Prepare Persons for Initial Employment (Pre-Employment)	
Code Number	Code Number	Code Number	Code Number
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART IV - GENERAL COMMENTS

18. Please list any comments which you or other officials of your organization may wish to make about the improvement of occupational education and training opportunities in the area. Include your suggestions as to the kind, scope, and duration of educational programs which should be provided. You may wish to attach additional sheets for detailed comments. Your comments will be of considerable value to the Occupational Education Survey.

We would appreciate having this questionnaire returned within one week in the envelope provided. Thank you for your interest and cooperation.